



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9575; Product Identifier 2016-NM-168-AD; Amendment 39-18992; AD 2017-17-02]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding Airworthiness Directive (AD) 2014-20-09, which applied to certain Bombardier, Inc., Model DHC-8-400 series airplanes. AD 2014-20-09 required an inspection for missing clamps that are required to provide positive separation between the alternating current (AC) feeder cables and the hydraulic line of the landing gear alternate extension, and related investigative and corrective actions if necessary.

This new AD requires removing airplanes from the AD applicability. This AD was prompted by reports of missing clamps that are required to provide positive separation between the AC feeder cables and the hydraulic line of the landing gear alternate extension. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>. You may view this referenced service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9575.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9575; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Assata Dessaline, Aerospace Engineer, Avionics and Administrative Services Section, FAA, New York ACO Branch,

1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7301; fax 516-794-5531.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2014-20-09, Amendment 39-17982 (79 FR 59630, October 3, 2014) (“AD 2014-20-09”). AD 2014-20-09 applied to certain Bombardier, Inc., Model DHC-8-400 series airplanes. The NPRM published in the Federal Register on February 22, 2017 (82 FR 11325). The NPRM was prompted by reports of missing clamps that are required to provide positive separation between the AC feeder cables and the hydraulic line of the landing gear alternate extension. The NPRM proposed to continue to require an inspection for missing clamps that are required to provide positive separation between the AC feeder cables and the hydraulic line of the landing gear alternate extension, and related investigative and corrective actions if necessary. We are issuing this AD to detect and correct chafing of the AC feeder cable. A chafed and arcing AC feeder cable could puncture the adjacent hydraulic line, which, in combination with the use of the alternate extension, could result in an in-flight fire.

Since we issued AD 2014-20-09, the FAA has determined that certain airplane serial numbers that are in a pre-modification MS 4M153025 configuration have sufficient space between the AC feeder cables and the landing gear alternate extension hydraulic line, and do not pose an in-flight fire risk. Therefore, these airplanes are not subject to the identified unsafe condition.

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2013-16R1, effective July 26, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Bombardier, Inc., Model DHC-8-400 series airplanes. The MCAI states:

During production checks, it was found that the appropriate clamps required to provide positive separation between the AC feeder cables and the hydraulic line of the landing gear alternate extension were omitted. The AC feeder cable could sag and be in direct contact with the swage fitting of the landing gear alternate extension hydraulic line, resulting in chafing of the AC feeder cable. The chafed and arcing AC feeder cable could puncture the adjacent hydraulic line. In combination with the use of the alternate extension system, this could result in an in-flight fire.

The original issue of this [Canadian] AD was issued to mandate the incorporation of [Bombardier] service bulletin (SB) 84-24-53 to * * * [do a general visual inspection for the presence of correctly installed clamps] and rectify, as necessary, for proper clamp installation.

Bombardier, Inc. has revised [Bombardier] SB 84-24-53 to remove serial numbers 4001 through 4034 from the Effectivity section, as it was determined that these serial numbers are Pre-Mod MS 4M153025, which allowed sufficient space between the AC feeder cables and the landing gear alternate extension hydraulic line to not pose an in-flight fire risk. Accordingly, revision 1 of this [Canadian] AD is issued to revise the Applicability section to reflect the Effectivity changes in [Bombardier] SB 84-24-53 Revision B, dated 10 September 2015.

The related investigative action is a general visual inspection of the AC power feeder cables and the hydraulic line of the landing gear alternate extension for damage due to chafing. The corrective actions include repair of chafed parts and replacement of

missing clamps. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9575.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Reference Only the Actions Required for Compliance

Horizon Air requested that paragraph (g) of the proposed AD reference only the actions required for compliance. Horizon Air stated that incorporating the service bulletin job set-up and close-out sections as a requirement of the AD restricts an operator's ability to perform other maintenance in conjunction with the incorporation of Bombardier Service Bulletin 84-24-53, Revision B, dated September 10, 2015. Horizon Air asserted that only paragraph 3.B., "Procedure," in the Accomplishment Instructions of Bombardier Service Bulletin 84-24-53, Revision B, dated September 10, 2015, should be referenced.

We agree with Horizon Air's request to exclude the "Job Set-up" and "Close Out" sections of Bombardier Service Bulletin 84-24-53, Revision B, dated September 10, 2015, for the reasons provided. We have revised paragraph (g) of this AD to require accomplishment of paragraph 3.B., "Procedure," of the Accomplishment Instructions of Bombardier Service Bulletin 84-24-53, Revision B, dated September 10, 2015.

Request to Allow Credit for Previous Actions Up to the Effective Date of this AD

Horizon Air requested that the proposed AD be changed to allow credit for previous actions in accordance with Bombardier Service Bulletin 84-24-53, dated May 11, 2012; or Bombardier Service Bulletin 84-24-53, Revision A, dated May 16, 2013; either up to the effective date of this AD; or within 6,000 flight hours or 36 months from November 7, 2014 (the effective date of AD 2014-20-09), whichever occurs first. Horizon Air stated that paragraph (h) of the proposed AD only allows credit for actions performed before November 7, 2014. Horizon Air noted that the compliance for AD 2014-20-09 is within 6,000 flight hours or 36 months after the effective date of November 7, 2014 (and AD 2014-20-09 specifies that the actions be done in accordance with Bombardier Service Bulletin 84-24-53, Revision A, dated May 16, 2013).

We partially agree. We agree that credit for the actions required by paragraph (g) of this AD done using Bombardier Service Bulletin 84-24-53, Revision A, dated May 16, 2013, should be allowed up until the effective date of this AD. However, we do not agree to allow credit for Bombardier Service Bulletin 84-24-53, dated May 11, 2012, beyond November 7, 2014. AD 2014-20-09 only gives credit for Bombardier Service Bulletin 84-24-53, dated May 11, 2012, before November 7, 2014. We have revised paragraph (h) of this AD accordingly.

Explanation of Change Made in this AD

We have revised paragraph (g) of this AD to remove the statement that only Bombardier Service Bulletin 84-24-53, Revision B, dated September 10, 2015, may be

used after the effective date of this AD because that statement is not necessary in this AD.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

We reviewed Bombardier Service Bulletin 84-24-53, Revision B, dated September 10, 2015. The service information describes procedures for a general visual inspection for installation of clamps between the AC feeder cables and hydraulic line of the landing gear alternate extension, and related investigative and corrective actions. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 52 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

Estimated costs

| Action | Labor cost | Parts cost | Cost per product | Cost on U.S. operators |
|--|--------------------------------------|------------|------------------|------------------------|
| Inspection, related investigative and corrective actions (retained actions from AD 2014-20-09) | 2 work-hours X \$85 per hour = \$170 | \$0 | \$170 | \$8,840 |

This AD merely removes certain airplanes from the applicability of this AD, and, therefore, adds no new actions or economic burden.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance

and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2014-20-09, Amendment 39-17982 (79 FR 59630, October 3, 2014), and adding the following new AD:

2017-17-02 Bombardier, Inc.: Amendment 39-18992; Docket No. FAA-2016-9575; Product Identifier 2016-NM-168-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2014-20-09, Amendment 39-17982 (79 FR 59630, October 3, 2014) (“AD 2014-20-09”).

(c) Applicability

This AD applies to Bombardier, Inc., Model DHC-8-400, -401, and -402 airplanes, certificated in any category, serial numbers 4035 through 4347 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 24, Electrical power.

(e) Reason

This AD was prompted by reports of missing clamps that are required to provide positive separation between the alternating current (AC) feeder cables and the hydraulic line of the landing gear alternate extension. We are issuing this AD to detect and correct chafing of the AC feeder cable. A chafed and arcing AC feeder cable could puncture the adjacent hydraulic line, which, in combination with the use of the alternate extension, could result in an in-flight fire.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Retained Clamp Inspection, Related Investigative Actions, and Corrective Actions, with Revised Service Information Having a Reduced Effectivity

This paragraph restates the requirements of paragraph (g) of AD 2014-20-09, with revised service information having a reduced Effectivity. Within 6,000 flight hours or 36 months after November 7, 2014 (the effective date of AD 2014-20-09), whichever occurs earlier: Do a general visual inspection for correctly installed clamps between the AC feeder cables and hydraulic line, and do all applicable related investigative and corrective actions, in accordance with paragraph 3.B., “Procedure,” of the Accomplishment Instructions of Bombardier Service Bulletin 84-24-53, Revision B, dated September 10, 2015. Do all applicable related investigative and corrective actions before further flight.

(h) Credit for Previous Actions

(1) This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before November 7, 2014 (the effective date of

AD 2014-20-09), using Bombardier Service Bulletin 84-24-53, dated May 11, 2012. This service bulletin is not incorporated by reference in this AD.

(2) This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD, using Bombardier Service Bulletin 84-24-53, Revision A, dated May 16, 2013. This service bulletin was incorporated by reference in AD 2014-20-09.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO Branch, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design

Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2013-16R1, effective July 26, 2016, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9575.

(2) For more information about this AD, contact Assata Dessaline, Aerospace Engineer, Avionics and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7301; fax 516-794-5531.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (k)(3) and (k)(4) of this AD.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 84-24-53, Revision B, dated September 10, 2015.

(ii) Reserved.

(3) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>.

(4) You may view this service information at the FAA, Transport Standards Branch, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on August 7, 2017.

Dionne Palermo,
Acting Director,
System Oversight Division,
Aircraft Certification Service.

[FR Doc. 2017-17094 Filed: 8/18/2017 8:45 am; Publication Date: 8/21/2017]